1ST & Final Bill

M. A. R. 57 (Rule 116) **No. D**

Measurement Book

64022

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Name of work :- Improvements & asphalting roads at Manjunatha Nagara Tengina thot, Byraveshwara nagara, Sampangi Ramaiah layout, main roads & cross road of M.E.I. Layout left side, & Bagalagunte in Ward No. 14 (5-works) package No. DZ 2017-18 (03).						
	Name of Agency :- M. S. Venkatesh						
	Est. Cost :- Rs. 250. Lakhs						
	Job code :- 014-18-000056, 014-18-000057, 014-18-000058, 014-18-000059						
	041-18-000060.						
	Work order No :- EE/DD/W0/308/2018-19 Dated: 02.02.19						

Measurement Recorded on :- 20.03.19

Scanned by CamScanner

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item NO: 1 Removing T.NO. 5.32 of KPWD S.R 2016-17)	B.S	Slab	of drain		& Stacking (P.NO. 25,	
				Total Qty @ TR		1647.90 m^2 73.59 "	121268.96/=
	Item NO: 2 Earth work excavation by manual means in ordinary Soil involving on average horizontal upto 2 meters and an average lift upto 0.5m excavated dressed. the disposed earth to be leveled of clods Complete as per Specifications. (P-141/19.1)			Surface leveled & sides neatly be leveled		neatly after breaking MORTH/chapter 3	
				Total Qty @ TR		4089.84 m^3 97.32 "	398023.23/=

Scanned by CamScanner

M. A. R. 57 (Rule 116) **No. D**

Measurement Book

64023

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item NO: 3 KSRB 4-1-2 : Providing & laying in Position Plain Cement Concrete of mix 1:3:6 with opc Cement @ 220 kgs, with 40mm & down Size graded granite metal Coarse aggregates @ 0.892 Cum & fine aggregates @ 0.465 Cum machine mixed, machine mixed, Concrete laid in layers not exceeding 15 cms. thick, well Compacted, infondation including Cost of all material's, labour, HOM of machinery, Curing Complete as per specifications. Specification KBS 4.1, 4.2.						
					Total Qty	59.76 m^3	
					@TR	6269.11	374642.01/=

Scanned by CamScanner

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item NO:4 KSRB 5-14 Providing & Constructing Precast Concrete Solid blocks with Compressive strength not less than 3.5 Newton 29mm with Cement mortar 1:4 masonry (Quion, Jamb, Closer blocks) with Solid concrete blocks of size 40x20x20cm Conforming to I.S: 2185/1965 in Super structure including cost of materials, labour charges, Scaffolding, Curing Complete as Per Specifications.					Total Qty 1099.20 m^2 @TR 1112.11	1222431.31/-
	Item NO:5 Providing & Constructing granite/trap/basalt size stone masonry in foundation with Cement mortar 1:6 stone hammered dressed in course not less than 20cms high, bond Stones at two m. apart in each course including cost of						

Scanned by CamScanner

M. A. R. 57 (Rule 116) **No. D**

Measurement Book

64024

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions			Contents	Reference to last Measurement
		Number	Length	Breadth / Depth		
1	2	3	4	5 / 6	7	8
	material & labour, curing complete as per specifications.				Total Qty 42.64 m^3 @ TR 4969.47	211898.20/=
	Item NO:6 KSRB4-1.6: Providing & laying in position plain cement concrete of mix 1:2:4 with cement @ 240 kgs, with 20mm & down size graded granite metal coarse aggregates @ 0.69 Cum & fine aggregates @ 0.459 Cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick well compacted in foundation plinth & walls, including cost of all materials, labour & Hom of machinery, curing complete as per Specifications. Specification No KBS 4.1,4.2.					

Scanned by CamScanner

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
				Total Qty		87.63	m^3
				@ TR		6457.82	565898.77/-
	Item No: 7 K3RB 15.1.1 Providing flush pointing to square rubble, Coursed or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including Cost of materials, labour, curing, Complete as per Specifications.						
				Total Qty		111.24	m^2
				@ TR		115.13	12807.06/-
	Item No: 8 Providing & fixing Kerb stones made out of CC 1:2:4 with top & bottom width 114 & 165mm respectively, 400 mm high & 450 mm in length						

Scanned by CamScanner

M. A. R. 57 (Rule 116) **No. D**

Measurement Book

64025

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Number	Dimensions Length	Breadth	Depth	Contents	Reference to last Measurement
1	2	3	4	5	6	7	8
	finished with CM 1:3 plastering & finishing Cutting, including form work, curing, including Cost of all materials labour, hire charges of machinery, loading, unloading, lead & lift, transportation etc., Complete.						
				Total qty		5105.33	No 3
				@ Rs		432.03	2205655.72/=
	Item No: 9 K3RRB 8001. Painting two Coats after filling the Surface with Synthetic enamel paint in approved shades on new plastered Concrete Surfaces with materials, labour Complete as per Specifications						

Scanned by CamScanner

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	MORTH CHAPTER : 8				Total Qty	720.00 m^2	
					@ TR	71.21	51271.20/=
	Item NO : 10 KSRRB 300 : 58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, Hom of machinery Complete as per specifications. MORTH/ chapter 3.				Total Qty	5410.50 m^2	
					@ TR	5.93	32084.27/=
	Item NO : 11 KSRRB m 360-55. Construction of Sub-graded & earthen shoulders with approved material Gravel / murrum						

Scanned by CamScanner

M. A. R. 57 (Rule 116) **No. D**

Measurement Book

64026

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	with all lifts & loads transporting to site, Spreading, grading to required Slope & Compacted to meet requirement of Table No. 300-2 Complete as Per Specifications (including cost of earth, watering charges & Compaction by Vibratory roller) MORTH Specification No. 305						
					Total Qty	811.58 m^2	
					@ TR	392.86	318837.32/=
	Item No: 12 KSRRB m 400-6.1 - Construction of granular Sub-base by providing close graded material, mixing in a mechanical mix plant at OMC carriage of mixed material to work site, Spreading in uniform						

Scanned by CamScanner

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	layers with mostos graded on prepared surface & Vibratory power rollers achieve the desired density. Complete as per Specifications. A plant mix method. close graded granular Sub base material as per 400-1 Fost Grading -II material.						
					Total Qty	1281.01 m^3	
					@ TR	1731.66	22 18273.78/-
	Item NO: 13 Providing laying, spreading & aggregates to wet mix macadam the material with water at OMC of mix method of tipper to Site paver in Sub/base Course on the well prepared Compacting with vibratory rollers to					Compacting graded stone Specifications including pre-mixing in mechanical mix plant carriage laying in uniform layers with surface & achieve the desired	

Scanned by CamScanner

M. A. R. 57 (Rule 116) **No. D**

Measurement Book

Serial No. .....

64027

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions			Contents	Reference to last Measurement
		Number	Length	Breadth / Depth		
1	2	3	4	5 / 6	7	8
	density Complete as per MORTH Specification and as per directions of the Engineer in charge (I.no. 406.etc, KPWD S.R. 2016-17)			No.	406.etc,	with all lead & lifts 20.18 P.No. 157 of
				Total Qty	1201.16 m^3	
				@TR	1979.72	2377960.48/=
	Item NO: 14 KSRRB M 500-6. Providing & applying primer Coat with S.S. bitumen emulsion on prepared Surface of granular base Such as WBM, WMM including cleaning of road Surface & Spraying primer at the rate of 0.60 kgs / Sqm using mechanical means Complete as per Specification. MORTH Specification No. 502.					

Scanned by CamScanner

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
				Total Qty		5410.50 m^2	
				@ TR		30.86	166968.03/=
	Item NO: 15 cleaning KSRRB500-2. the existing black surface with brooms, soft brushes & finally dusting with old gunny bags and/or Compressed air to receive bituminous treatment including cost of all materials labour, Hom of machineries Complete as per Specifications.						
				Total Qty		1058.40 m^2	
				@ TR		3.56	37409.90/=
	Item NO: 16 KSRRB 3000 Filling pot-holes & Patch Repairs with Bituminous Concrete 40 mm KSRRB M 3000-5. Removal of all failed material, trimming of Completed excavation to provide form						

Scanned by CamScanner

M. A. R. 57 (Rule 116) **No. D**

Measurement Book

64028

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Number	Dimensions			Contents	Reference to last Measurement
			Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Vertical faces cleaning of surface, applying tack coat on the sides & base of excavation at 2.5kg/10sqm as per clause 500.3 back filling the pot holes with hot bituminous materials as per clause 500-4, Compacting, trimming & finishing the surface to form a smooth continous surface all as per clause 3004.2, Complete as per Specifications MORTH Specification NO. 3004.2.						
					Total Qty	521.39 m^2	
					@ TR	338.26	176365.38/=
	Item NO: 17 KSRRB:	500-7	Providing	and	applying	tack coat	

Scanned by CamScanner

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Using 80/100 grade bitumen (VG10) on the Surface at 2.5 kg per 10 Sqm, heating bitumen in boiler fitted with Spray Set (excluding cleaning of road Surface) including cost of all materials, labour, Hire of machineries Complete as per Specifications MORTH Chapter 5					Prepared black topped	
					Total Qty	31837.80 m^2	
					@ TR	13.06 = 415801.67/=	
	Item NO: 18 KSRRB 500-11 Providing and laying bituminous macadam on Prepared Surface with Crushed Coarse aggregates as per design mix formula for base/binding Course including loading of aggregates with F.E. loader hot mixing of stone aggregates & bitumen in hot mix plant transporting the mixed material in tipper to paver						

Scanned by CamScanner

M. A. R. 57 (Rule 116) **No. D**

Measurement Book

64029

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	and laying mixed materials with Paver finisher to the required level & graded, rolling by power roller to achieve the desired density, but excluding lead, lift & Cost of all materials - labour, Hire of machineries complete as per Specifications using 40/60 TPH Capacity H.M.P. with mechanical Paver Gr-II (50mm to 75mm) with 3.3% VG-30 Bitumen.					Total Qty 795.95 m^3 @ TR 6210.95	4943605.65/-
	Item NO: 19 Providing & laying bituminous Concrete 40 mm thick with hot mix plant, using Crushed aggregates of specified grading, premixed						

Scanned by CamScanner

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	with bituminous binder & filler, transporting the hot mix to work Site laying with a Paver finisher, transporting the hot mix to work Site laying with a paver finisher to the required graded, level & alignmat rolling with smooth wheeled vibratory & tandeem rollers to acheive the desired Compaction as Per MORTH Specification clause No 500.9 Complete in all respects complete as per Specifications using 40/60 TP Copatity H.M.P. with mechanical paver Gr-II (30mm to 45 mm) with 6% VG-30 Bitumen MORTH Specification. No. 509 (Sl. No. 21.22.6, page 164).						
					Total Qty	615.02 m^3	
					@ TR	15280.12	9397579.40/=
	Item NO:20 Add plastic to Bituminous Concrete 8% of Bitumen						

Scanned by CamScanner

M. A. R. 57 (Rule 116) **No. D**

Measurement Book

Serial No. 64030

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Number	Dimensions		Depth	Contents	Reference to last Measurement
			Length	Breadth			
1	2	3	4	5	6	7	8
				Total Qty		428.94 kg	
				@ TR		30.23	12966.81/-
	Item NO: 21 Road marking with Hot Applied thermoplastic Compound with Reflectorising glass beads on bituminous surface, providing & laying of hot applied thermoplastic Compound 2.5mm thick including reflectorising glass beads as per IRC 35. the finished surface to be level uniform & free from streaks & holes Complete as per specification of KPWD S.R 2016-2017. Specification No. 803. P. No. 181 - I, 24.15						
				Total Qty		760.28 m^2	
				@ TR		607.68	462006.95/=

Scanned by CamScanner

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item NO: 22 KSRRB M 800-35 Providing & fixing of road stud 100x100 mm, die. NOS. Cast in aluminium, resistant to corrosive effect of salt and grit fitted with lense reflectors, installed in Concrete or asphaltic surface by drilling hole 30 mm upto a depth of 60mm & bedded in a suitable bituminous ground or epoxy mortar, all as per BS: 873 Part 4. 1973 Complete as per Specifications.						
						Total Qty 725.00 Nos	
						@ ₹ 402.35	291703.75/-
	Item NO: 23 Refixing B.S. Slab of Drain & Pointing in CM (1:3) P. NO. 25, I-NO. 5.33 of KPWD SR 2016-2017.						

Scanned by CamScanner

M. A. R. 57 (Rule 116) **No. D**

Measurement Book

Serial No. 64031

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
				Total Qty		915.84 m^2	
				@ TR		90.20	82608.77/=
	Item NO: 24 Providing Pre Cast Slab 100 mm thick including Cost of all materials, labour, curing, transportation, loading, unloading etc., Complete as Per the direction of engeneer in charge				Data	rate.	
				Total Qty		466.00 m^2	
				@ TR		2053.53	956944.98
	Item NO: 25 Lead charges for Conveying the excavated earth.						

Scanned by CamScanner

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	including loading & unloading upto 10kms					as per directions.	
				Total Qty		4089.84 m³	
				@ Rs		118.69	485423.11/-
							2,75,33,193=00
				Grand Total			2,75,40,436.71

Audited and admitted for Rs. 27533193=00

Passed by Cheque for Rs. 26149250=00

(.....)

by adjustment Rs. 1383943=00

Accounts Superintendent

Exe. Engineer

B.B.M.P. Dasarahalli Division

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ದಾಸರಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ
ಗಲಗುಂಟೆ. ಬಿಬಿಎಂಪಿ
ಬೆಂಗಳೂರು

Scanned by CamScanner

M. A. R. 57 (Rule 116) No. D

Measurement Book

64032

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

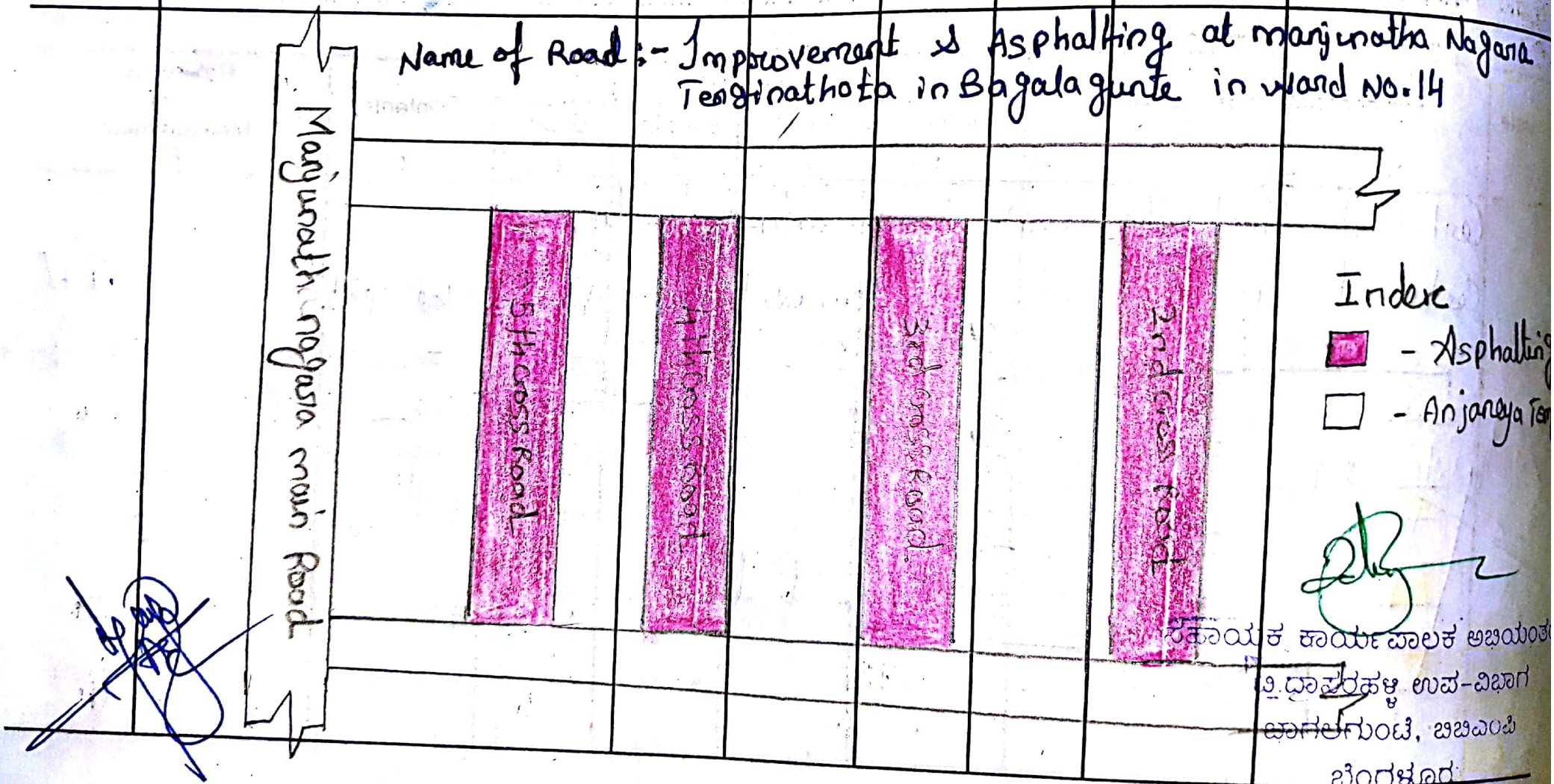
Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Certified that the work done satisfactorily Certified that the debris removed from the work spot. ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು ಟಿ.ದಾಸರಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ ಬಾಗಲಗುಂಟೆ. ಬೆಂಗಳೂರು ಬೆಂಗಳೂರು						

Scanned by CamScanner

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8

Name of Road :- Improvement to Asphalting at Manjunatha Nagara Tenginathota in Bagalagunte in ward No. 14



ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತ
ಪೀಣ್ಯಾ ದಾಸರಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ
ಯಲಹಂಕ, ಬಿಬಿಎಂಪಿ
ಬೆಂಗಳೂರು

Scanned by CamScanner

M. A. R. 57 (Rule 116) **No. D**

Measurement Book

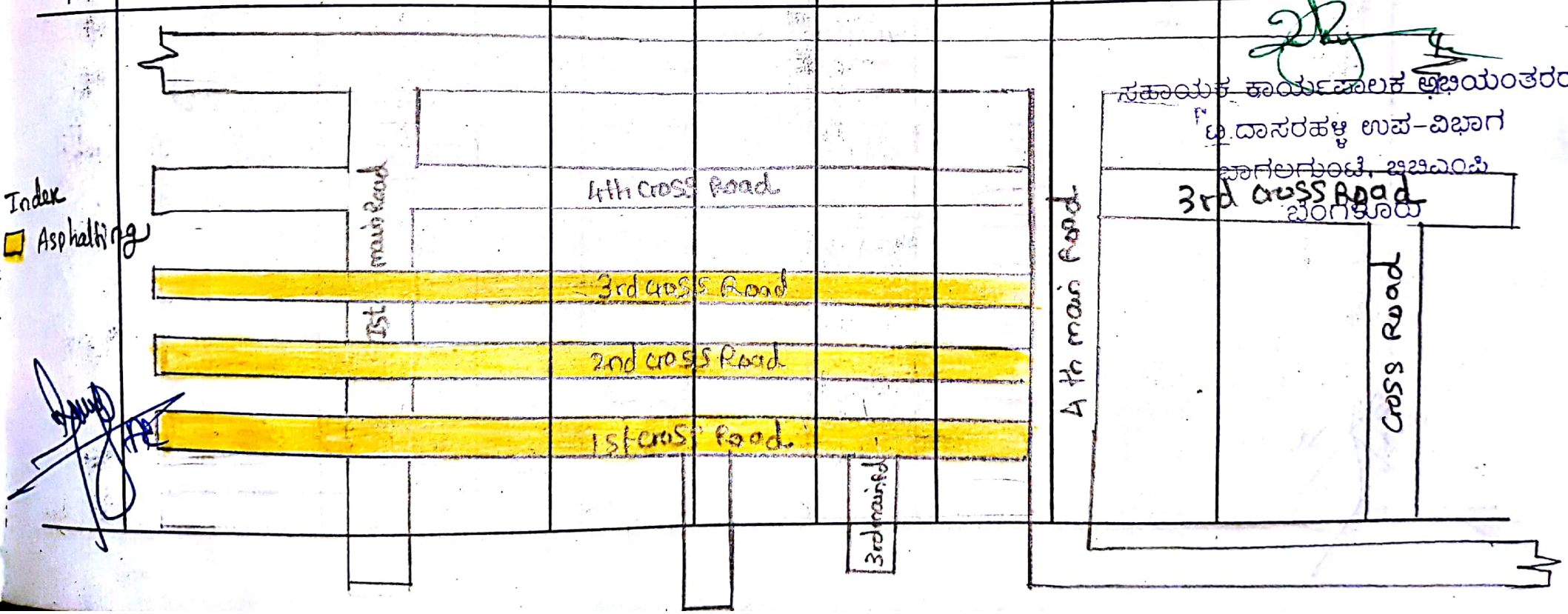
Serial No. .....Name of work :- Improvements & Asphalting Roads at 64033

Name of work ..Byraveshwaranagar..in. From .Bagalagunte..in. Toward..No.14.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8



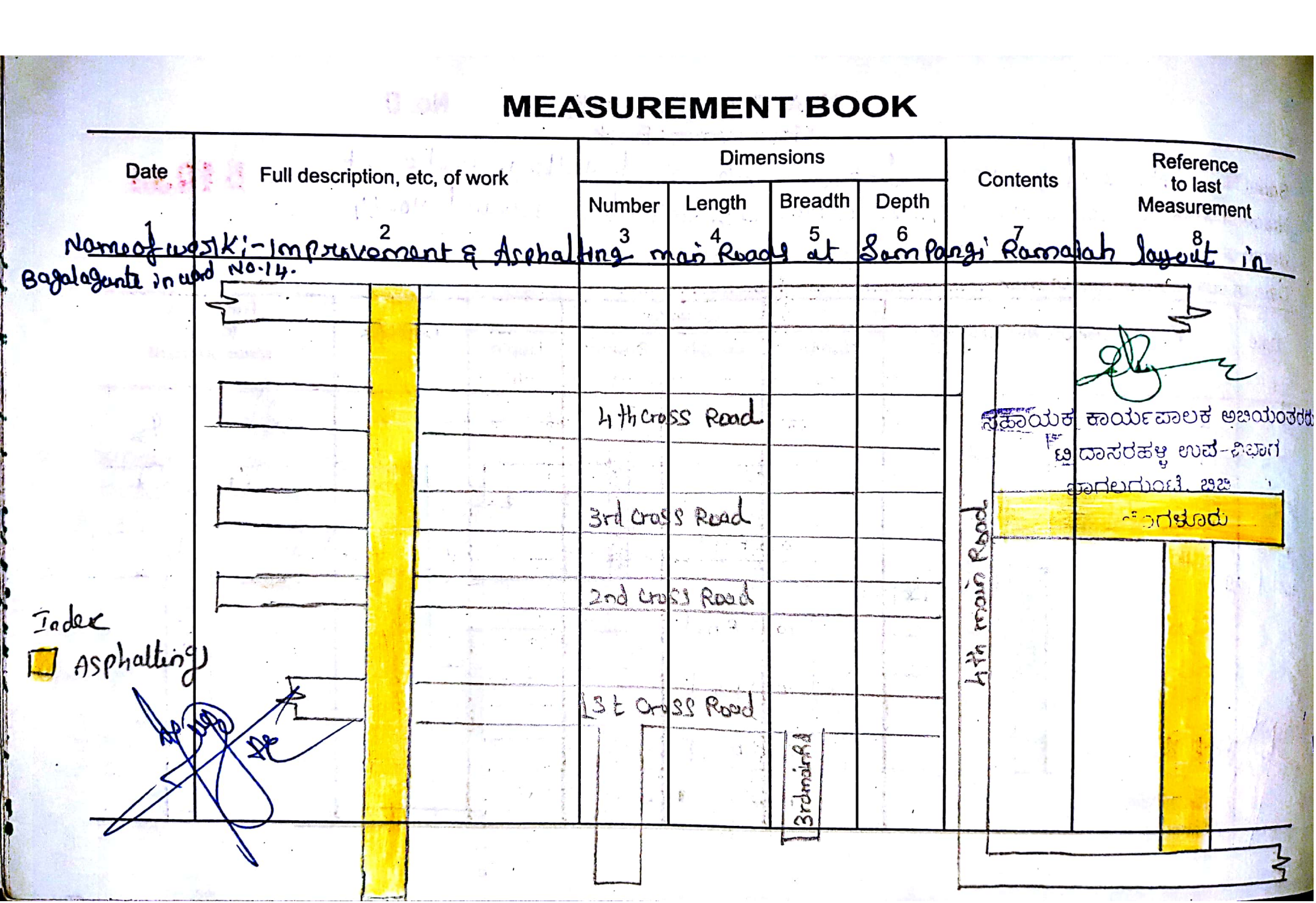
ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪ-ವಿಭಾಗ
ಬಾಗಲಗುಂಟೆ, ಬಿಬಿಎಂಪಿ
ಬೆಂಗಳೂರು

Scanned by CamScanner

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8

Name of work:- Improvement & Asphalting main Roads at Sampangi Ramaiah layout in Bagalagunte in ward No.14.



ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ದಾಸರಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ
ಬಾಗಲಗುಂಟೆ, ಬಿಬಿ
ಬೆಂಗಳೂರು

Scanned by CamScanner

M. A. R. 57 (Rule 116) No. D

Measurement Book

Serial No. .....

Name of work Name of work :— Improvements & Asphalting to main Roads & Cross 64034

Name of Contractor of nature of Agency... From ..... To .....

Date of commencement of work.....

Road of M.E.I Layout Left Side in Bagalagunte in ward No. 14

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8

ನಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಟಿ.ದಾಸರಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ
ಬಾಗಲಗುಂಟೆ, ಬಿಬಿಎಂಪಿ

Scanned by CamScanner

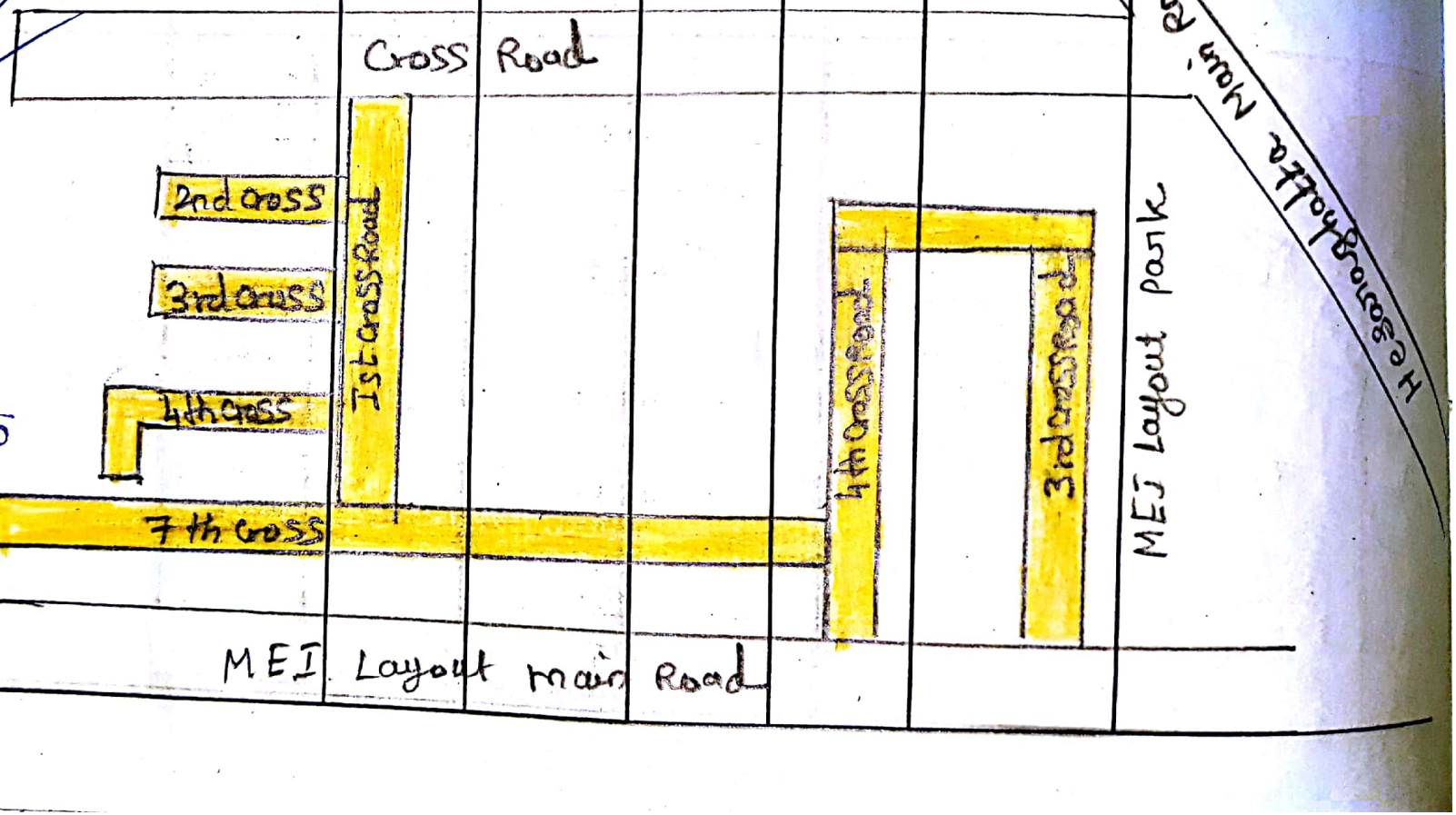
MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8

e Name of work :- Improvements & Asphalting roads in Bagalagunte in ward No. 14

Index

Asphalting



ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಟಿ.ದಾಸರಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ
ಬಾಗಲಗುಂಟೆ, ಬೆಂಗಳೂರು

Scanned by CamScanner